Fig. 1

RELATED ART

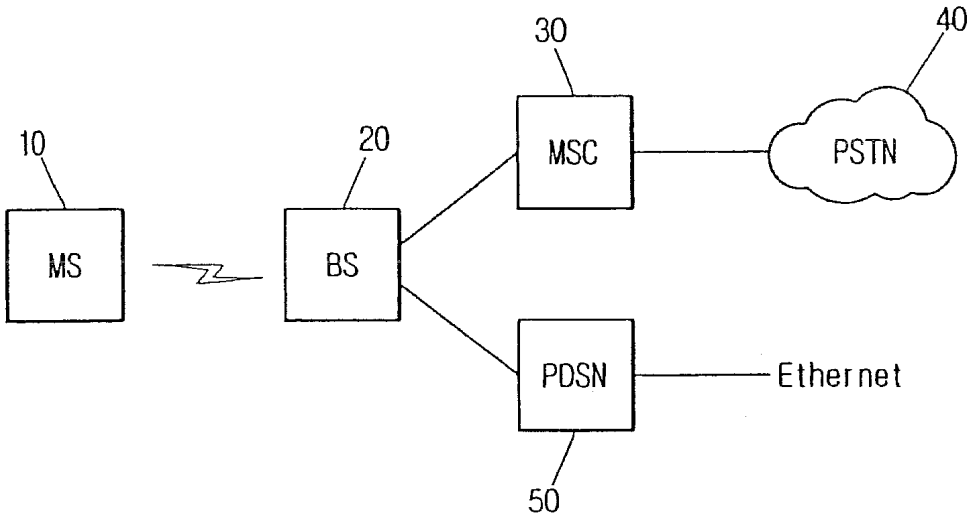


Fig. 2A

RELATED ART

	MuxPDU Header						Permitted on			
Transmit Rate (bits/sec)	Mixed Mode (MM)	Traffic Type (TT)	Traffic Mode (TM)	Primary Traffic (bits/ block)	Signaling Traffic (bits/ block)	Secondary Traffic (bits/block)	F C H	D C C H	S C C H	S C H
9600	'0'	-	-	171	0	0	Y	Y	Y	Y
	'1'	'0'	'00'	80	88	0	Y	Y	N	N
	'1'	'0'	'01'	40	128	0	Y	Y	N	N
	'1'	'0'	'10'	16	152	0	Y	Y	N	N
	'1'	'0'	'11'	0	168	0	Y	Y	N	N
	'1'	'1'	'00'	80	0	88	Y	Y	N	N
	'1'	'1'	'01'	40	0	128	Y	Y	N	N
	'1'	'1'	'10'	16	0	152	Y	Y	N	N
	'1'	'1'	'11'	0	0	168	Y	Y	Y	Y
4800	-	-	-	80	0	0	Y	N	N	N
2400/ 2700	-	-	-	40	0	0	Y	N	N	N
1200/ 1500	-	-	-	16	0	0	Y	N	N	N

Fig. 2B

RELATED ART

	MuxPDU Header					Permitted on			
Transmit Rate (bits/sec)	Mixed Mode (MM)	Frame Mode (FM)	Primary Traffic (bits/ block)	Signaling Traffic (bits/ block)	Secondary Traffic (bits/block)	FCH	DCCH	SCCH	SCH
14400	'0'	-	266	0	0	Y	Y	Y	Y
	'1'	'0000'	124	138	0	Y	Y	N	N
	'1'	'0001'	54	208	0	Y	Y	N	N
	'1'	'0010'	20	242	0	Y	Y	N	N
	'1'	'0011'	0	262	0	Y	Y	N	N
	'1'	'0100'	124	0	138	Y	Y	N	N
	'1'	'0101'	54	0	208	Y	Y	N	N
	'1'	'0110'	20	0	242	Y	Y	N	N
	'1'	'0111'	0	0	262	Y	Y	Y	Y
	'1'	'1000'	20	222	20	Y	Y	N	N
7200	'0'	-	124	0	0	Y	N	N	N
	'1'	'000'	54	67	0	Y	N	N	N
	'1'	'001'	20	101	0	Y	N	N	N
	'1'	'010'	0	121	0	Y	N	N	N
	'1'	'011'	54	0	67	Y	N	N	N
	'1'	'100'	20	0	101	Y	N	N	N
	'1'	'101'	0	0	121	Y	N	N	N
	'1'	'110'	20	81	20	Y	N	N	N
3600	'0'	-	54	0	0	Y	N	N	N
	'1'	'00'	20	32	0	Y	N	N	N
	'1'	'01'	0	52	0	Y	N	N	N
	'1'	'10'	20	0	32	Y	N	N	N
	'1'	'11'	0	0	52	Y	N	N	N
1800	'0'	-	20	0	0	Y	N	N	N
	'1'	-	0	0	20	Y	N	N	N

Fig. 2C

RELATED ART

	MuxPDU Header		Traffic bits/ block
	sr_id	Reserved	
Rate Set 1	'001'-'110'	'000'	170/346
	'111'	'000'	0
Rate Set 2	'001'-'110'	'000'	266/538
	'111'	'000'	0

Fig. 3

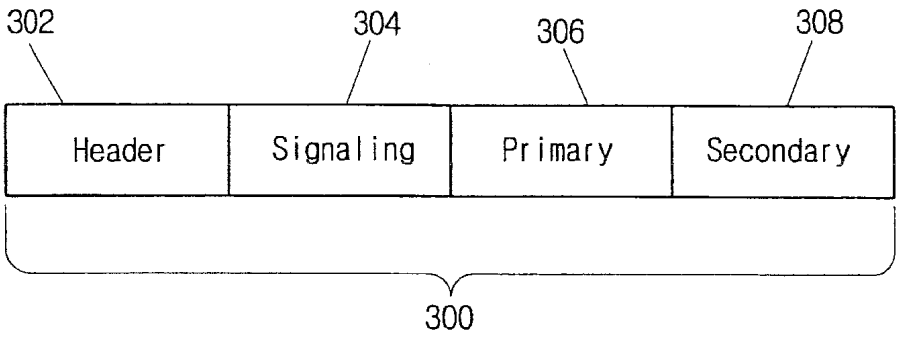
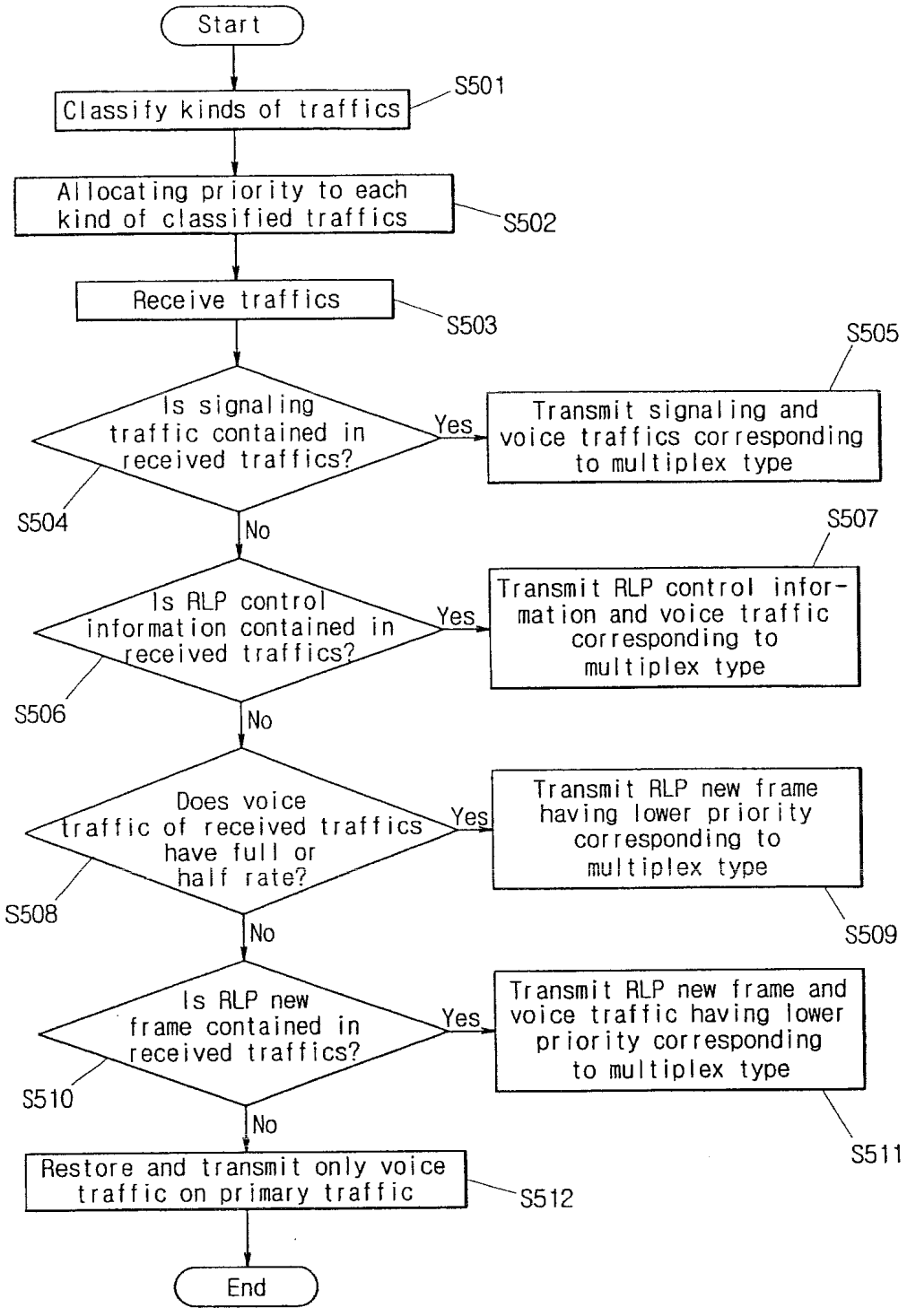


Fig. 4

kind of traffic		priority
Signaling	Signaling	1
Data	RLP SYNK frame	2
	RLP SYNK ACK frame	3
	RLP ACK frame	4
	RLP NAK frame	5
	RLP Retransmission frame	6
	RLP NEW frame	9
	RLP RLP frame	12
Voice	Full Rate	7
	Half Rate	8
	Quarter Rate	10
	Eighth Rate	11

Fig. 5


Start
Classify kinds of traffics
S501
Allocating priority to each kind of classified traffics
S502
Receive traffics
S503
Is signaling traffic contained in received traffics?
S504
Yes
Transmit signaling and voice traffics corresponding to multiplex type
S505
No
Is RLP control information contained in received traffics?
S506
Yes
Transmit RLP control information and voice traffic corresponding to multiplex type
S507
No
Does voice traffic of received traffics have full or half rate?
S508
Yes
Transmit RLP new frame having lower priority corresponding to multiplex type
S509
No
Is RLP new frame contained in received traffics?
S510
Yes
Transmit RLP new frame and voice traffic having lower priority corresponding to multiplex type
S511
No
Restore and transmit only voice traffic on primary traffic
S512
End

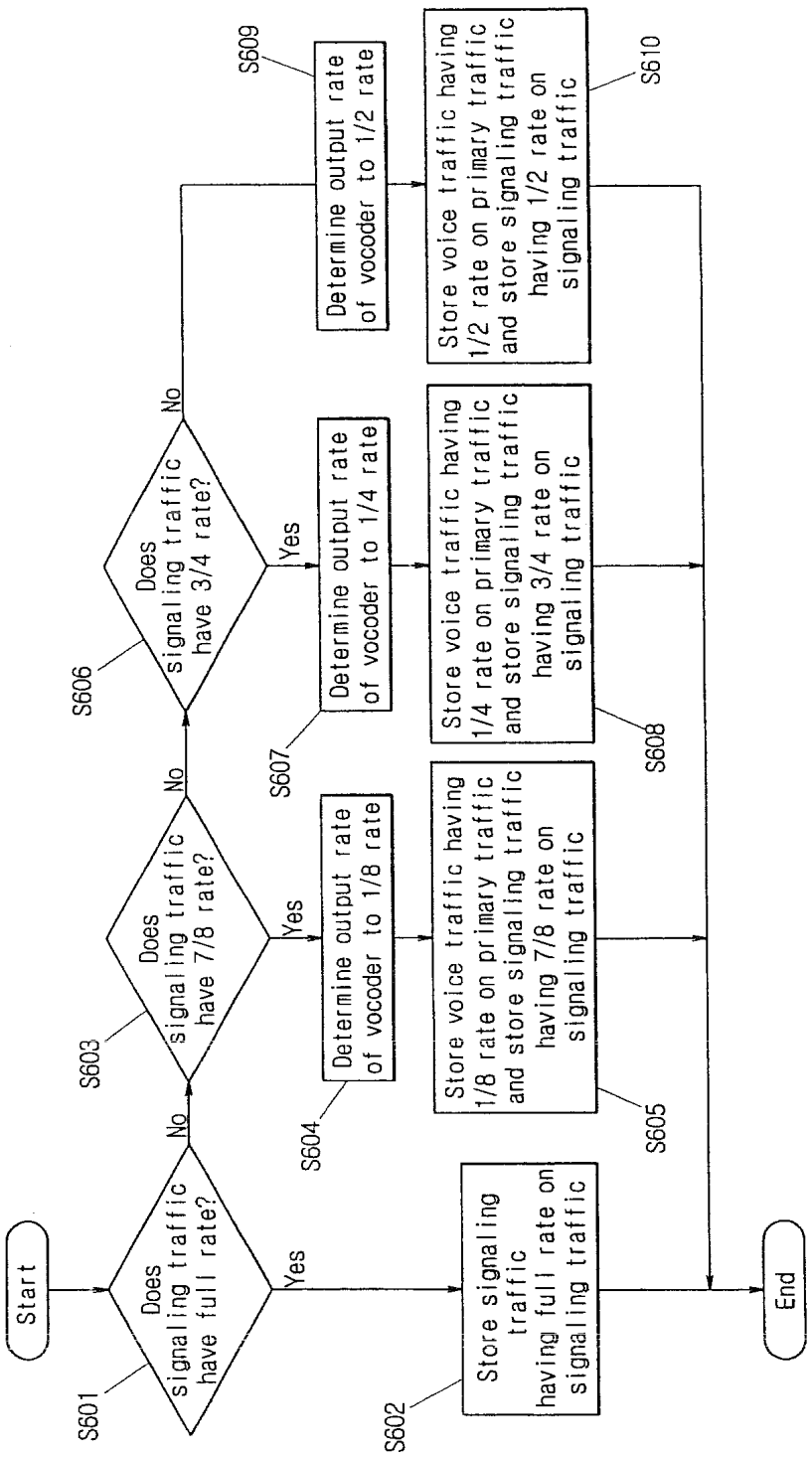

Start
Does signaling traffic have full rate?
S601
Yes
No
Store signaling traffic having full rate on signaling traffic
S602
Does signaling traffic have 7/8 rate?
S603
Yes
No
Determine output rate of vocoder to 1/8 rate
S604
Store voice traffic having 1/8 rate on primary traffic and store signaling traffic having 7/8 rate on signaling traffic
S605
Does signaling traffic have 3/4 rate?
S606
Yes
No
Determine output rate of vocoder to 1/4 rate
S607
Store voice traffic having 1/4 rate on primary traffic and store signaling traffic having 3/4 rate on signaling traffic
S608
Determine output rate of vocoder to 1/2 rate
S609
Store voice traffic having 1/2 rate on primary traffic and store signaling traffic having 1/2 rate on signaling traffic
S610
End

Fig. 6

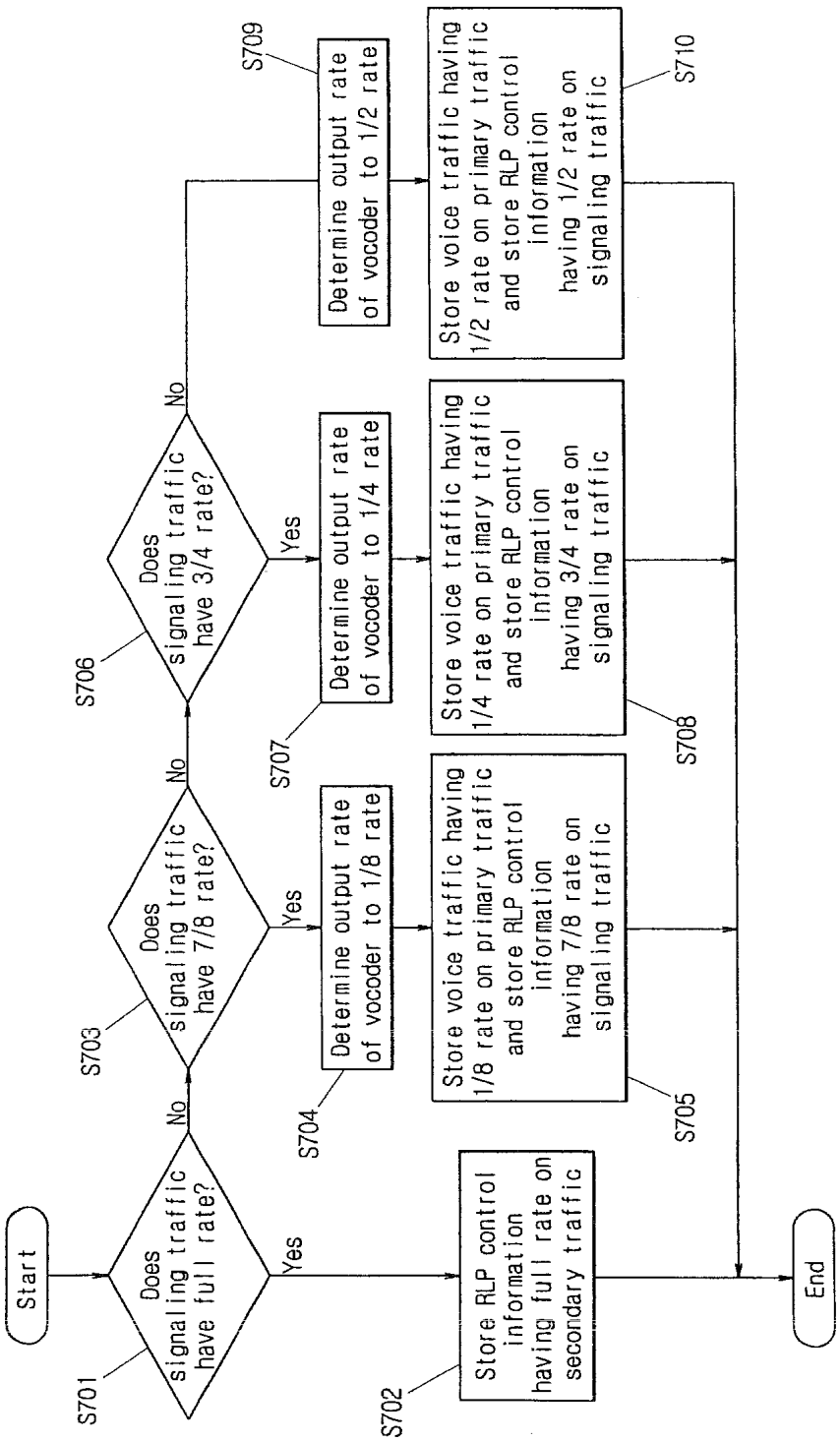

Start
Does signaling traffic have full rate?
S701
Yes
No
Store RLP control information having full rate on secondary traffic
S702
Does signaling traffic have 7/8 rate?
S703
Yes
No
Determine output rate of vocoder to 1/8 rate
S704
Store voice traffic having 1/8 rate on primary traffic and store RLP control information having 7/8 rate on signaling traffic
S705
Does signaling traffic have 3/4 rate?
S706
Yes
No
Determine output rate of vocoder to 1/4 rate
S707
Store voice traffic having 1/4 rate on primary traffic and store RLP control information having 3/4 rate on signaling traffic
S708
Determine output rate of vocoder to 1/2 rate
S709
Store voice traffic having 1/2 rate on primary traffic and store RLP control information having 1/2 rate on signaling traffic
S710
End

Fig. 7

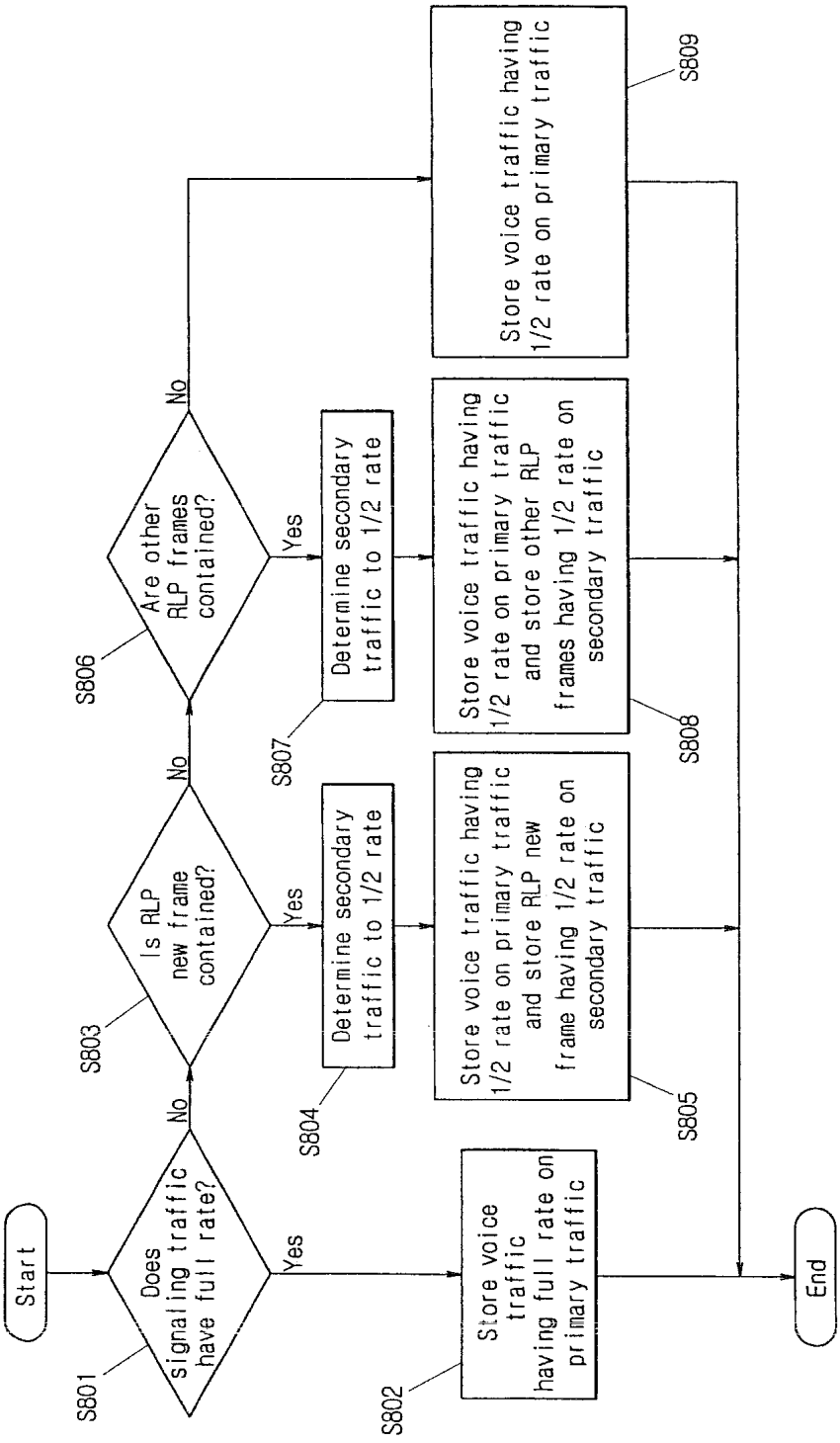

Start
Does Signaling traffic have full rate?
S801
Yes
No
Store voice traffic having full rate on primary traffic
S802
Is RLP new frame contained?
S803
Yes
No
Determine secondary traffic to 1/2 rate
S804
Store voice traffic having 1/2 rate on primary traffic and store RLP new frame having 1/2 rate on secondary traffic
S805
Are other RLP frames contained?
S806
Yes
No
Determine secondary traffic to 1/2 rate
S807
Store voice traffic having 1/2 rate on primary traffic and store other RLP frames having 1/2 rate on secondary traffic
S808
Store voice traffic having 1/2 rate on primary traffic
S809
End

Fig. 8

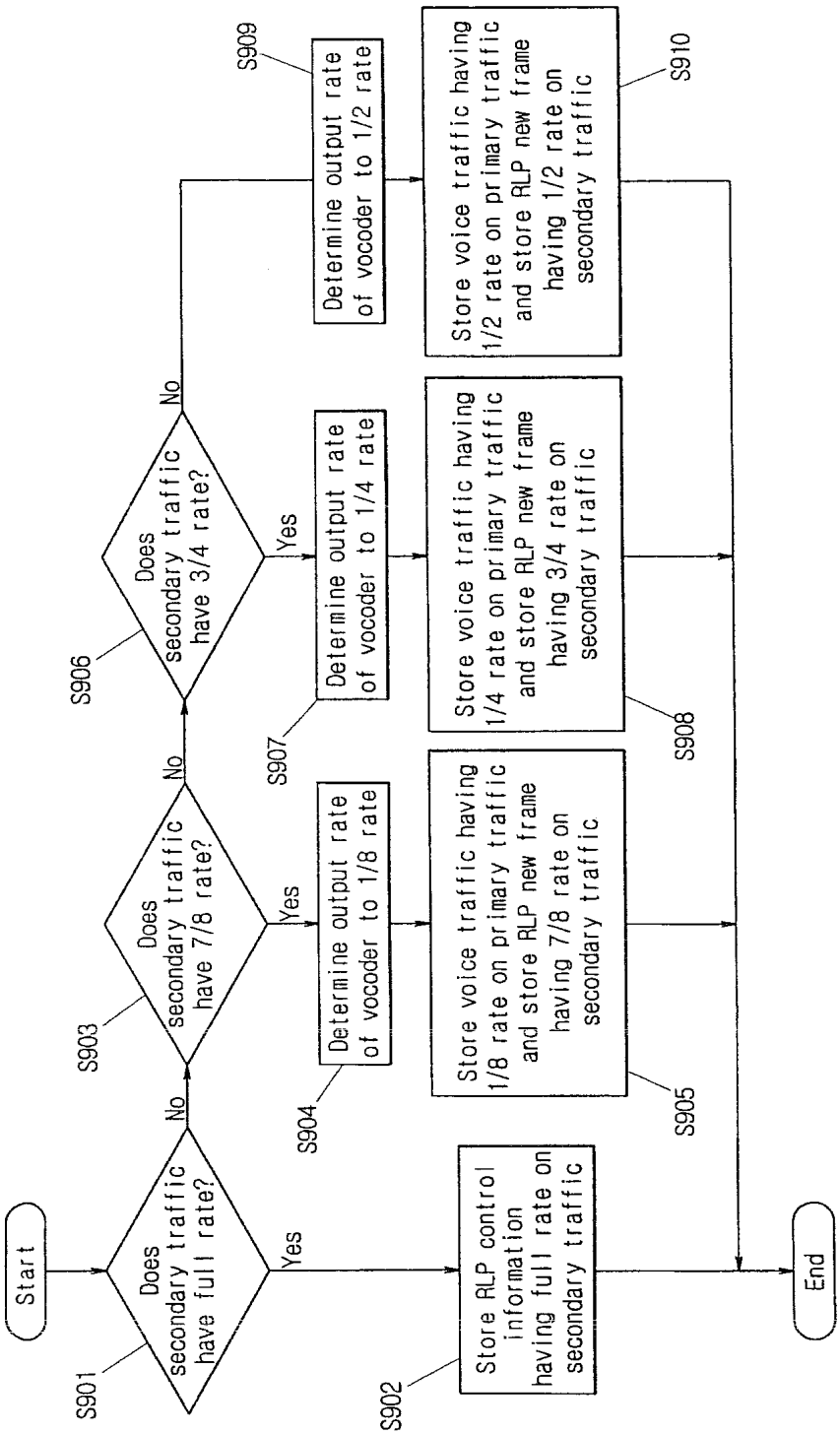

Start
Does secondary traffic have full rate?
S901
Yes
No
Store RLP control information having full rate on secondary traffic
S902
Does secondary traffic have 7/8 rate?
S903
Yes
No
Determine output rate of vocoder to 1/8 rate
S904
Store voice traffic having 1/8 rate on primary traffic and store RLP new frame having 7/8 rate on secondary traffic
S905
Does secondary traffic have 3/4 rate?
S906
Yes
No
Determine output rate of vocoder to 1/4 rate
S907
Store voice traffic having 1/4 rate on primary traffic and store RLP new frame having 3/4 rate on secondary traffic
S908
Determine output rate of vocoder to 1/2 rate
S909
Store voice traffic having 1/2 rate on primary traffic and store RLP new frame having 1/2 rate on secondary traffic
S910
End

Fig. 9